



Alvord Unified School District

Our Promise: All students will realize their unlimited potential.

Facilities Report

March – August 2021

Kevin Emenaker

Executive Director, Administrative Services

September 16, 2021





Alvord Unified School District

Our Promise: All students will realize their unlimited potential.

Agenda

- Facility Projects
 - Before and After Photos
- Work Orders by Site (March, April, May, June, July and August 2021)
- Climatec Energy Master Plan Update



Various Schools After Photos (Marquees)

School: Various Schools

Project Description: Replace
Non-Functioning Marquees

Board Approval Date:
October 22, 2020

Fiscal Impact: \$463,000 –
Cares Fund

Project Duration: 3 Months

Start Date: January 2021

Completed: March 2021



Various Schools Before & After Photos (Marquees)



Norte Vista High School Before Photos

School: Norte Vista High School

Project Description: Exterior
Repairs

Board Approval Date: December
17, 2020

Fiscal Impact: \$956,000 – County
Schools Facilities Fund

Project Duration: 5 months

Start Date: February 2021

Completed: July 2021



Norte Vista High School After Photos



Foothill Elementary School After Photos

School: Foothill Elementary School

Project Description: Building
Repairs

Board Approval Date: March 18,
2021

Fiscal Impact: \$220,000.00 - County
Schools Facilities Fund

Project Duration: 4 months

Start Date: March 2021

Completed: July 2021



Foothill Elementary School After Photos



Maintenance Work Order Report - March 2021 through August 2021										
School Site	W.O.'s Still Active from the Program End Date - Feb. 28, 2021	Work Orders Received	Work Orders Completed	Work Orders Still Active		School Site	W.O.'s Still Active from the Program End Date - Feb. 28, 2021	Work Orders Received	Work Orders Completed	Work Orders Still Active
Arlanza Elementary	71	108	98	81		Arizona Middle	359	188	164	383
Collett Elementary	126	116	101	141		Loma Vista Middle	195	183	185	193
Foothill Elementary	63	126	110	79		Villegas Middle	169	148	128	189
La Granada Elementary	124	129	94	159		Wells Middle	245	173	176	242
Lake Hills Elementary	55	132	116	71		Hillcrest High	282	245	212	315
McAulliffe Elementary	104	114	104	114		La Sierra High	580	325	302	603
Myra Lynn Elementary	475	152	137	490		Norte Vista High	459	328	350	437
Orrenmaa Elementary	132	68	63	137		Alvord Continuation	76	80	70	86
Promenade Elementary	223	106	113	216		Alvord Alternative Education	48	34	22	60
RMK Elementary	191	108	104	195		Total	4450	3183	7633	4695
Stokoe Elementary	283	99	100	282						
Terrace Elementary	44	67	56	55						
Twinhill Elementary	80	89	79	90						
Valley View Elementary	66	65	54	77						

		Phase I		Alvord HS	Arizona MS	Arlanza ES	Collett ES	Facilities (M.O.T.)	Foothill ES	Hillcrest HS	La Granada ES	La Sierra HS	Lake Hills ES	Loma Vista MS	McAuliffe ES	Myra Linn ES	Norte Vista HS	Orrenmaa ES	Stokoe ES	Promenade ES	RMK ES	Terrace ES	Twinhill ES	Valley View ES	Villegas MS	Wells MS	
BUILDING AUTOMATION SYSTEM (BAS)	New Wi-Fi Based BAS												✓								✓		✓		✓		
	New BACnet Compatible BAS			✓	✓	✓	✓	✓	✓		✓	✓		✓	✓	✓	✓	✓		✓	✓	✓		✓	✓	✓	
	Advanced BAS Programming					✓	✓		✓	✓		✓		✓			✓	✓	✓			✓					
	Integrate Occupancy Sensors			✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	Exterior Lighting Control			✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	Demand Control Ventilation				✓	✓	✓	✓	✓		✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	BAS Training			✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	
HEATING & COOLING	New High Efficiency HVAC Units (rooftop, wall-mount + split systems)	Completed (Phase I & II)	2		26	30	2	12	7	15		15	7	13			21	92				13	7		15		34
		Phase III Modernizations*		24	11	19		9	11		15	25	52			22	25	13	66	11		20	14	7		21	
		Phase IV	19	5	11		4	4		5	101	1	15	41	2	3	6	6	42	43	8	11	27	76			
	Central Plant Systems	New High Efficiency Chiller/ Re-Condition Chiller		1							1		2			1	1										
		New High Efficiency Boiler		2							1					1	2										
		Other Modernizations**		37							21					21	21										
	Add High Efficiency Air Conditioning to Gym											✓					✓										
	Add High Efficiency Air Conditioning to Kitchen			✓		✓		✓		✓	✓			✓	✓	✓	✓	✓		✓	✓				✓		
LIGHTING	Interior Fluorescent Lighting Upgrades		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	
	Interior LED Lighting Modernization		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	Exterior LED Lighting Modernization		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	Install/Modify Dual Technology Occupancy Sensors		✓	✓	✓	✓		✓		✓	✓	✓	✓	✓		✓					✓	✓	✓	✓	✓		
	Fixture Mounted Dimming Sensor			✓				✓		✓	✓	✓	✓					✓		✓	✓			✓		✓	
SOLAR	Pool Solar Thermal Water Heating								✓			✓				✓											
	Solar Shade Structures								✓			✓	✓				✓			✓					✓		
OTHER	Non-Solar Shade Structures				✓	✓			✓		✓				✓				✓								
WATER	Irrigation Improvements		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

* New HVAC units will have MERV-13 filters & economizers for enhanced ventilation
** Modernizations include new pumps, air handling units, fan coil units, and/or variable air volume (VAV) boxes; see mechanical inventory for further details

Phase I

Implemented FY 15/16
(Govn't Code 4217)

- HVAC Modernizations at 10 Sites (252 Units)
- New Central Plant Systems at 2 Sites
- New Building Automation Systems (BAS) at 6 Sites
- Lighting Modernizations
- Solar Thermal Pool Heating at 3 Sites

Phase II

Implemented FY 19/20
(Govn't Code 4217)

- HVAC Modernizations at 6 Sites (59 Units)
- Add A/C to La Sierra & Norte Vista Gyms
- New Central Plant Systems at 2 Sites
- New BAS + BAS Upgrades at 14 sites
- Complete LED Lighting Districtwide
- Solar Parking at 1 Site

Phase III

Board Approved for
Implementation June 2021
(Govn't Code 4217)

- HVAC Modernizations at 17 sites (365 Units)
- Enhanced Ventilation & MERV-13 filters for New HVAC Units
- New BAS at 6 Sites
- Solar Outdoor Learning & Dining Structures at 5 Sites
- Shade Structures (Non-Solar) at 6 Sites

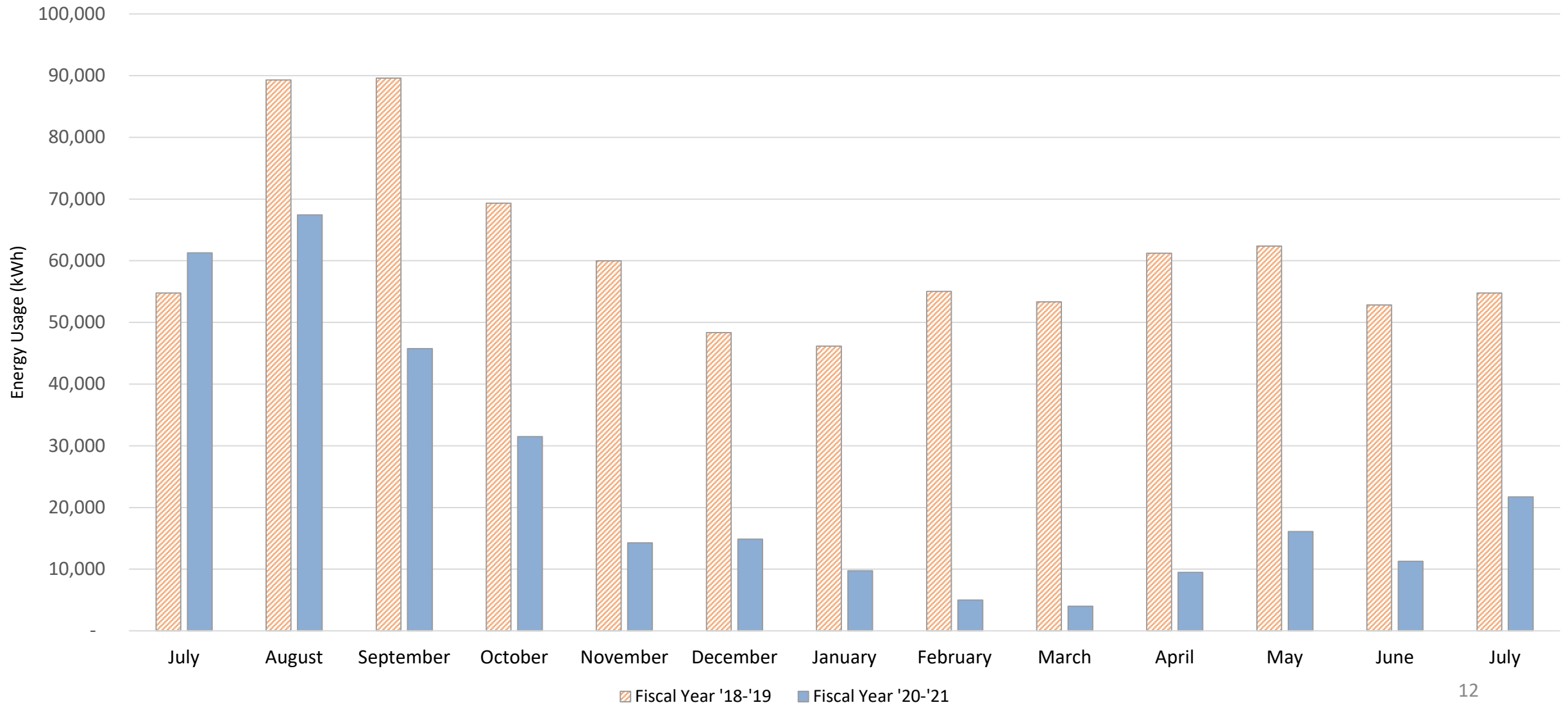
Phase IV

Board Considers for
Implementation Oct 2021
(Resolution 1)

- HVAC Modernizations at 18 sites (430 Units)
- Add Air Conditioning / New HVAC at 12 Kitchens
- Central Plant Modernizations at 4 Sites
- Enhanced Ventilation & MERV-13 filters for New HVAC Units
- New BAS at 9 sites
- Irrigation Improvements

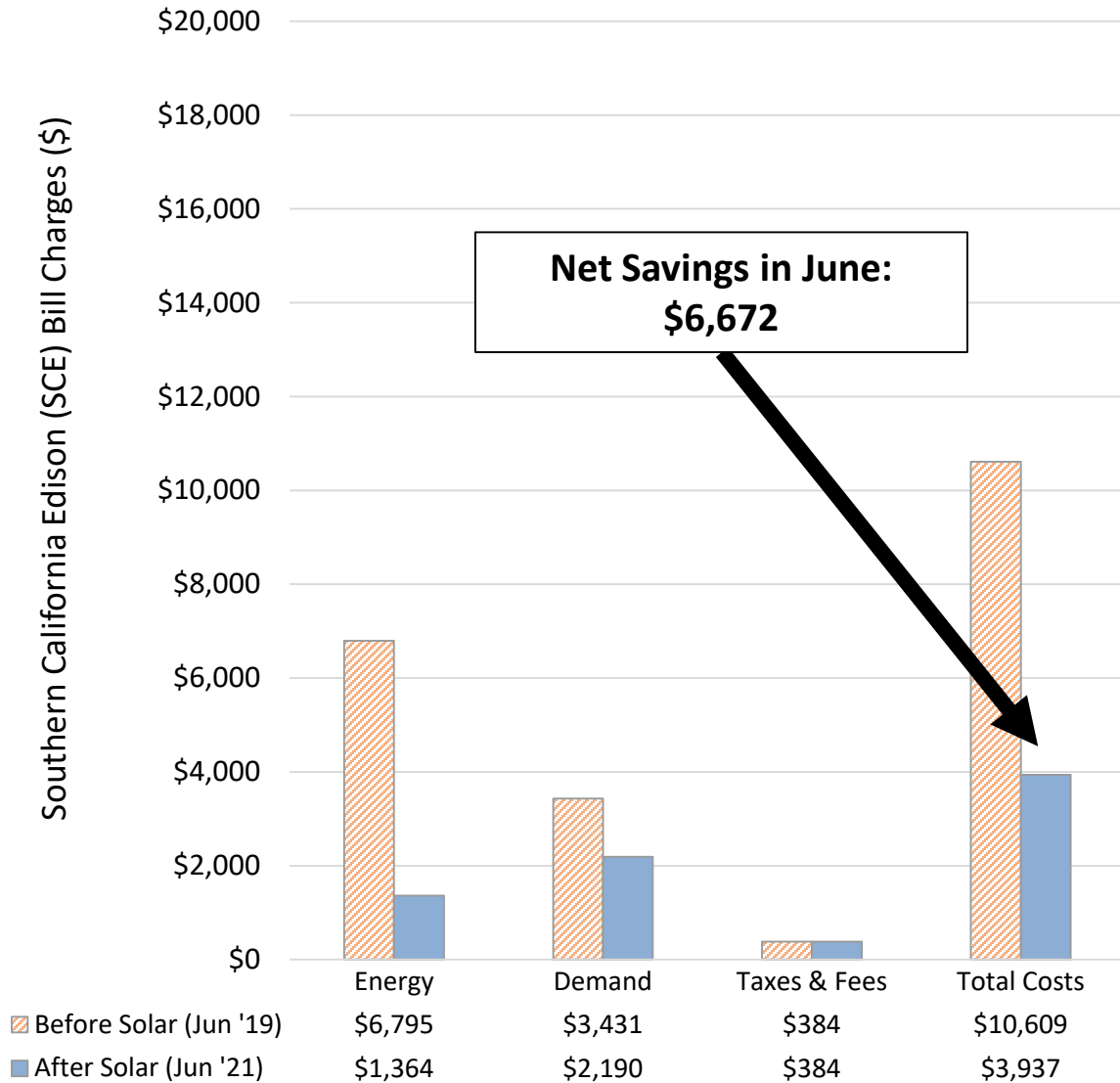
Villegas Solar Pilot Program

Villegas Energy Usage: Before & After Solar

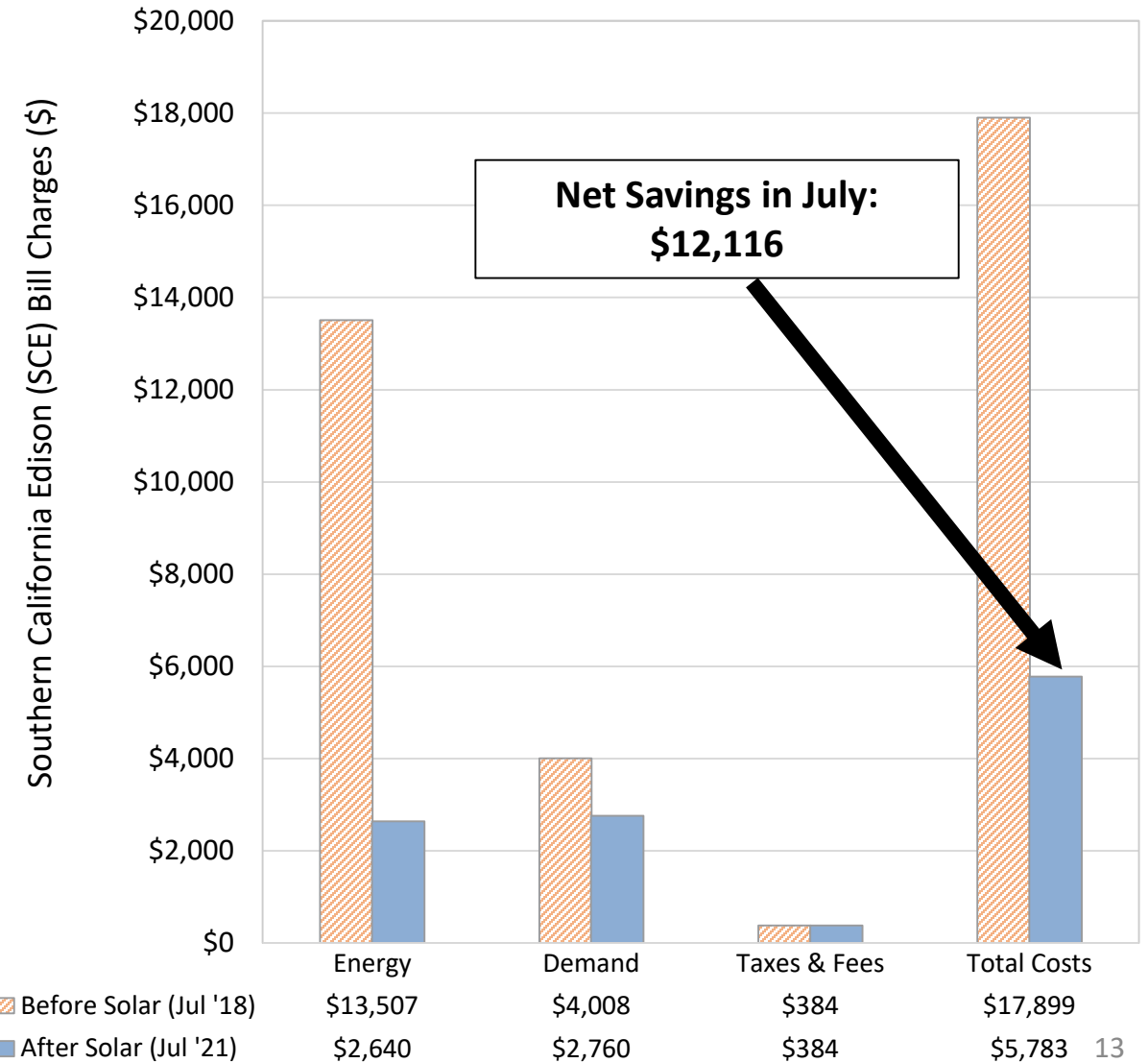


Villegas Solar Pilot Program

Villegas MS Sample Bill Breakdown



Villegas Energy Bill: Before & After Solar



Phase IV Funding Plan



Infrastructure Improvements:

Phase III <i>(in process)</i>	\$ 19M
Phase IV	\$ 19M

Total Program Savings \$31.8M

Possible Funding Sources:

ESSER II Federal Stimulus

ESSER III Federal Stimulus



Next Steps for AUSD Energy Master Plan

- | | |
|---|---------------|
| ➤ Board Authorized Phase III Installation Agreement | June |
| ➤ Complete Phase III Design | June - August |
| ➤ Phase III Equipment Ordered | August |
| ➤ Facilities Report to the Board | Tonight |
| ➤ Commence Phase III Construction | October |
| ➤ Board Considers ESSER III Expenditure Plan* | October 21 |
| ➤ Board Considers Phase IV Installation Agreement* | October 21 |

****If authorized by the Board, the following next steps will occur:***

- | | |
|--------------------------------------|----------------------|
| ➤ Complete Phase IV Design | Nov - Dec |
| ➤ Phase IV Equipment Ordered | December |
| ➤ Commence Phase IV Construction | February |
| ➤ Phase III & IV Construction Period | 24 months (combined) |